VL JUNE 85

VZ200

MORSE TUTOR PROGRAM

This program runs on the standard TRS80 MC10 with 4 Kbytes of memory, and should also be suitable for the TRS80 CoCo. It runs random Morse in groups of five characters. You may select the number of characters to be reproduced (up to 200), the speed (up to 15 words per minute) and to have letters, numbers or both. A delay between letters and words may also be selected.

The program starts by sounding the preset characters, and on completion they are printed on the screen. There is provision to re-run without resetting the variables, and an auto-run facility that prints the checklist on-screen, pauses, then re-runs.

When you call for 200 characters the computer is using very close to 4 Kbytes. For this reason, line numbers were kept low to take up less memory and no 'anti-crash' programming has been done. If you make an incorrect entry during the menu setup, the program may indicate an error, in which case you will have to re-run the program.

If you're using a CoCo use the word 'pause' instead of 'delay' in lines 12, 29 and 80; the CoCo doesn't seem to like the word 'delay'.

Basil Heath,
Hamilton, Qld

```
1 CLS
2 PRINT"AUTO RUN":PRINT"YES(1)":
PRINT"NO (2)"
3 CLEAR 500
5 DATA 63,62,60,56,48,32,33,35,3
9,57,6,17,21,9,2,20,11,16,4,30,1
3,18,7,5,15,22,27,10,8,3,12,24,1
4,25,29,19
6 INPUT R
7 DIM B$(36)
8 FOR I 1 TO 36:READ J:LET B$(J)
 CHR$(I)
9 NEXT I:CLS
10 INPUT"SPEED(WPM)(MAX 15)?";SP
EED
11 LET SPEED 7.5/SPEED
12 INPUT"DELAY(0 15)?";DELAY:DEL
AY DELAY*50
13 INPUT"NO: CHARACTERS(MAX 200)
";N
14 INPUT"LETTERS(1)NUMBERS(2)OR
BOTH(3)?";T
15 DIM I$(N)
16 CLS:PRINT TAB(5)"MORSE TUTOR
PROGRAM":FOR I 1 TO N
17 LET I$(I) CHR$(RND(10* 1*(T
1)+26* 1*(T 2))+10* 1*(T 1)):NE
XT I
18 FOR I 1 TO N
19 LET X ASC(B$(ASC(I$(I))))
20 GOSUB 65
23 IF I INT(I/5)*5 THEN 29
25 IF I N THEN 32
27 NEXT I
29 FOR Z 1 TO INT(200*SPEED+(DEL
AY*5)):NEXT Z
30 GOTO 25
32 FOR I 1 TO N
33 IF ASC(I$(I)) 10 THEN 39
37 PRINT CHR$(ASC(I$(I))+47);
38 GOTO 40
39 PRINT CHR$(ASC(I$(I))+55);
40 IF I INT(I/25)*25 THEN 46
41 IF I INT(I/5)*5 THEN 44
42 IF I N THEN 49
43 NEXT I
44 PRINT" ";
45 GOTO 42
46 PRINT
47 GOTO 42
49 IF R 2 THEN 90
50 PRINT:PRINT:PRINT
51 PRINT"PRESS KEY(1)(ENTER)TO R
E TRY":PRINT "PRESS KEY(2)(ENTER
) TO EXIT"
52 INPUT P:IF P 2 THEN 16
53 DATA 80,82,79,71,82,65,77,32,
66,89,58,45,32,66,46,72,69,65,84
,72,32,86,75,52,65,66,72
54 CLS:PRINT:PRINT
57 FOR I 1 TO 27
59 READ A
61 PRINT CHR$(A);
63 NEXT I:END
65 LET Y X/2:LET X INT(Y)
67 O (2*SPEED*(1+(Y X)*3))
70 SOUND 200,O
75 IF X 1 THEN 80
77 FOR Z 1 TO INT(30*SPEED):NEXT
Z
78 GOTO 65
80 FOR Z 1 TO INT(120*SPEED+(DEL
AY*3)):NEXT Z
85 RETURN
90 PRINT:PRINT:PRINT"PRESS 'BREA
K' TO EXIT"
95 FOR I 1 TO 10000:NEXT I:GOTO
16
```

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4,25,29,19
6 INPUT R
7 DIM B$(36)
8 FOR I=1 TO 36:READ J:LET B$(I)
 CHR$(J)
9 NEXT I:CLS
10 INPUT"SPEED(WPM)(MAX 15)?";SP
EED
11 LET SPEED=7.5/SPEED
12 INPUT"DELAY(0-15)?";DELAY:DEL
AY=DELAY*50
13 INPUT"NO:-CHARACTERS(MAX 200)
";N
14 INPUT"LETTERS(1)NUMBERS(2)OR
BOTH(3)?";L
15 DIM T$(N)
16 CLS:PRINT TAB(5)"MORSE TUTOR
PROGRAM":FOR I=1 TO N
17 LET T$(I)=CHR$(RND(10*-1*(L
1)+26*-1*(L=2))+10*-1*(L=1)):NE
XT I
18 FOR I=1 TO N
19 LET X=ASC(B$(ASC(T$(I))))
20 GOSUB 65
23 IF I=INT(I/5)*5 THEN 29
25 IF I=N THEN 32
27 NEXT I
29 FOR Z=1 TO INT(200*SPEED+(DEL
AY*5)):NEXT Z
30 GOTO 25
32 FOR I=1 TO N
34 IF ASC(T$(I))=10 THEN 39
37 PRINT CHR$(ASC(T$(I))+47);
38 GOTO 40
39 PRINT CHR$(ASC(T$(I))+54);
40 IF I=INT(I/25)*25 THEN 46
41 IF I=INT(I/5)*5 THEN 44
42 IF I=N THEN 49
43 NEXT I
44 PRINT" ";
45 GOTO 42
46 PRINT
47 GOTO 42
49 IF R=2 THEN 90
50 PRINT:PRINT:PRINT
51 PRINT"PRESS KEY(1)(ENTER)TO R
E-TRY":PRINT "PRESS KEY(2)(ENTER
) TO EXIT"
52 INPUT P:IF P=2 THEN 16
53 DATA 80,82,79,71,82,65,77,32,
66,89,58,45,32,66,46,72,69,65,84
,72,32,86,75,52,65,66,72
54 CLS:PRINT:PRINT
57 FOR I=1 TO 27
59 READ A
61 PRINT CHR$(A);
63 NEXT I:END
65 LET Y=X/2:LET X=INT(Y)
67 Q=(2*SPEED*(1+(Y-X)*4))
70 SOUND 200,Q
75 IF X=1 THEN 80
77 FOR Z=1 TO INT(40*SPEED):NEXT
Z
78 GOTO 65
80 FOR Z=1 TO INT(120*SPEED+(DEL
AY*3)):NEXT Z
85 RETURN
90 PRINT:PRINT:PRINT"PRESS 'BREA
K' TO EXIT"
95 FOR I=1 TO 10000:NEXT I:GOTO
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```


* WRONG HEADING. SEE "Morsetutor Program AGAIN"